

\$%^STN;HighlightOn= ***;HighlightOff=*** ;

Connecting via-Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptakmv1751

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

***** Welcome to STN International *****

- NEWS 1 Web Page for STN Seminar Schedule - N. America
- NEWS 2 JUL 02 LMEDLINE coverage updated
- NEWS 3 JUL 02 SCISEARCH enhanced with complete author names
- NEWS 4 JUL 02 CHEMCATS accession numbers revised
- NEWS 5 JUL 02 CA/CAPplus enhanced with utility model patents from China
- NEWS 6 JUL 16 CAPplus enhanced with French and German abstracts
- NEWS 7 JUL 18 CA/CAPplus patent coverage enhanced
- NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
- NEWS 9 JUL 30 USGENE now available on STN
- NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags
- NEWS 11 AUG 06 FSTA enhanced with new thesaurus edition
- NEWS 12 AUG 13 CA/CAPplus enhanced with additional kind codes for granted patents
- NEWS 13 AUG 20 CA/CAPplus enhanced with CAS indexing in pre-1907 records
- NEWS 14 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
- NEWS 15 AUG 27 USPATOLD now available on STN
- NEWS 16 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data
- NEWS 17 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index
- NEWS 18 SEP 13 FORIS renamed to SOFIS
- NEWS 19 SEP 13 INPADOCDB enhanced with monthly SDI frequency
- NEWS 20 SEP 17 CA/CAPplus enhanced with printed CA page images from 1967-1998
- NEWS 21 SEP 17 CAPplus coverage extended to include traditional medicine patents
- NEWS 22 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
- NEWS 23 OCT 02 CA/CAPplus enhanced with pre-1907 records from Chemisches Zentralblatt
- NEWS 24 OCT 19 BEILSTEIN updated with new compounds
- NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
- NEWS HOURS STN Operating Hours Plus Help Desk Availability
- NEWS LOGIN Welcome Banner and News Items
- NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific

research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

***** STN Columbus *****

FILE 'HOME' ENTERED AT 09:41:47 ON 01 NOV 2007

=> file caplus

COST IN U.S. DOLLARS	ENTRY	SINCE FILE SESSION	TOTAL
FULL ESTIMATED COST		0.21	0.21

FILE 'CAPLUS' ENTERED AT 09:42:21 ON 01 NOV 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 1 Nov 2007 VOL 147 ISS 19

FILE LAST UPDATED: 31 Oct 2007 (20071031/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> sea (ZnO OR zinc oxide)

104123 ZNO

11 ZNOS

104127 ZNO

(ZNO OR ZNOS)

643999 ZINC

139 ZINCS

644024 ZINC

(ZINC OR ZINCS)

1808909 OXIDE

351382 OXIDES

1908083 OXIDE

(OXIDE OR OXIDES)

104423 ZINC OXIDE

(ZINC(W)OXIDE)

L1 148409 (ZNO OR ZINC OXIDE)

=> sea L1 and (Al OR aluminum) and doped

1015815 AL

5693 ALS

1021186 AL

(AL OR ALS)

1004800 ALUMINUM

305 ALUMINUMS

1004863 ALUMINUM

(ALUMINUM OR ALUMINUMS)

302540 DOPED

2 DOPEDS

302541 DOPED

(DOPED OR DOPEDS)

L2 2961 L1 AND (AL OR ALUMINUM) AND DOPED

=> sea L2 and nano?

448599 NANO?

L3 245 L2 AND NANO?

=> sea L3 and (nanorod OR nanonail OR nanowire)

3279 NANOROD

4978 NANORODS

5303 NANOROD

(NANOROD OR NANORODS)

16 NANONAIL

24 NANONAILS

27 NANONAIL

(NANONAIL OR NANONAILS)

10647 NANOWIRE

14055 NANOWIRES

14708 NANOWIRE

(NANOWIRE OR NANOWIRES)

L4 28 L3 AND (NANOROD OR NANONAIL OR NANOWIRE)

=> d 1-28 IALL

L4 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:1087474 CAPLUS <<LOGINID::20071101>>

ENTRY DATE: Entered STN: 27 Sep 2007

TITLE: Room-temperature optical properties of ***Al*** -
doped ***ZnO*** ***nanowire*** array

AUTHOR(S): Bin, Tang; Hong, Deng; Shui, Zheng-Wei; Min, Wei;
Chen, Jin-Ju; Xin, Hao

CORPORATE SOURCE: School of Science Southwest Petroleum University,
Chengdu, 610500, Peop. Rep. China

SOURCE: Wuli Xuebao (2007), 56(9), 5176-5179

CODEN: WLHPAR; ISSN: 1000-3290

PUBLISHER: Zhongguo Kexueyuan Wuli Yanjiuso

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

CLASSIFICATION: 73 (Optical, Electron, and Mass Spectroscopy and Other
Related Properties)

ABSTRACT:

Al - ***doped*** ***ZnO*** ***nanowire*** arrays were synthesized with Au catalysis on Si(100) substrate using the chem. vapor deposition technique. Only (002) diffraction peaks of ***ZnO*** can be found in the XRD patterns of the samples, which shows that the as-grown ***nanowires*** are highly cryst. in nature and grow along the [001] direction. The SEM images show that the ***ZnO*** ***nanowires*** are perpendicular to the substrate surface. Room-temp. photoluminescence (PL) measurement shows 3 near band-edge emission peaks at 373, 375 and 389 nm. Anal. shows that the band gap of ***Al*** - ***doped*** ***ZnO*** ***nanowires*** is 3.343 eV and the exciton binding energy is 0.156 eV. Room-temp. PL spectrum of pure ***ZnO*** ***nanowires*** shows 3 near band-edge emission peaks at 377, 379 and 389 nm. The band gap of pure ***ZnO*** ***nanowires*** is 3.301 eV and the exciton binding energy is 0.113 eV, which shows that the band gap increases due to ***Al*** doping.

L4 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN